

4 **AP20 Rec'd PCT/PTO 27 JUL 2006**CLAIMS

1. Process for reducing the level of harmful substances in tobacco leaves, comprising the following steps:

- steeping the said leaves in a water bath at a temperature of between 13°C and 25°C for between 4 and 12 hours,

- cooling the said leaves to a temperature not higher than -35°C, and

- gradually heating the said leaves at an average rate of not more than 2.0°C/h up to a temperature of at least 35°C.

2. Process according to Claim 1, in which the said leaves are steeped in a water bath at a temperature of between 14°C and 16°C for between 6 and 10 hours.

3. Process according to any one of the preceding claims, in which the said leaves are cooled to a temperature of between -35°C and -40°C.

4. Process according to any one of the preceding claims, in which the said leaves are heated at an average rate of between 1.5 and 1.8°C/h.